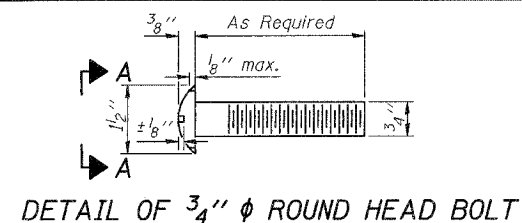


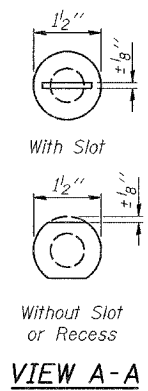
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12 16 SHEETS
F.A.P. 132	102BR-1	MASSAC	82	65	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

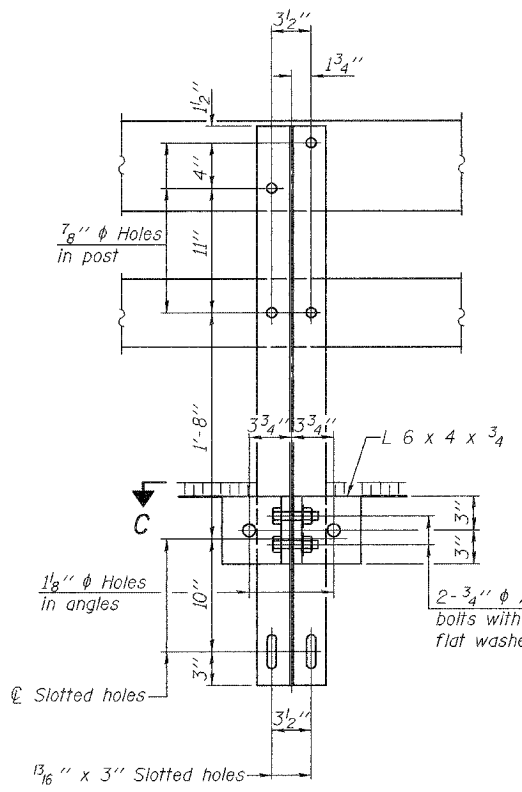
Contract #78032



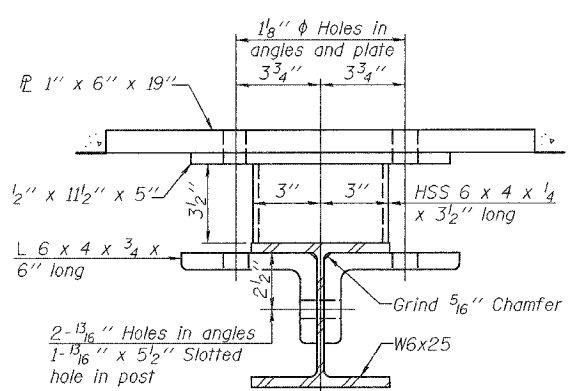
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



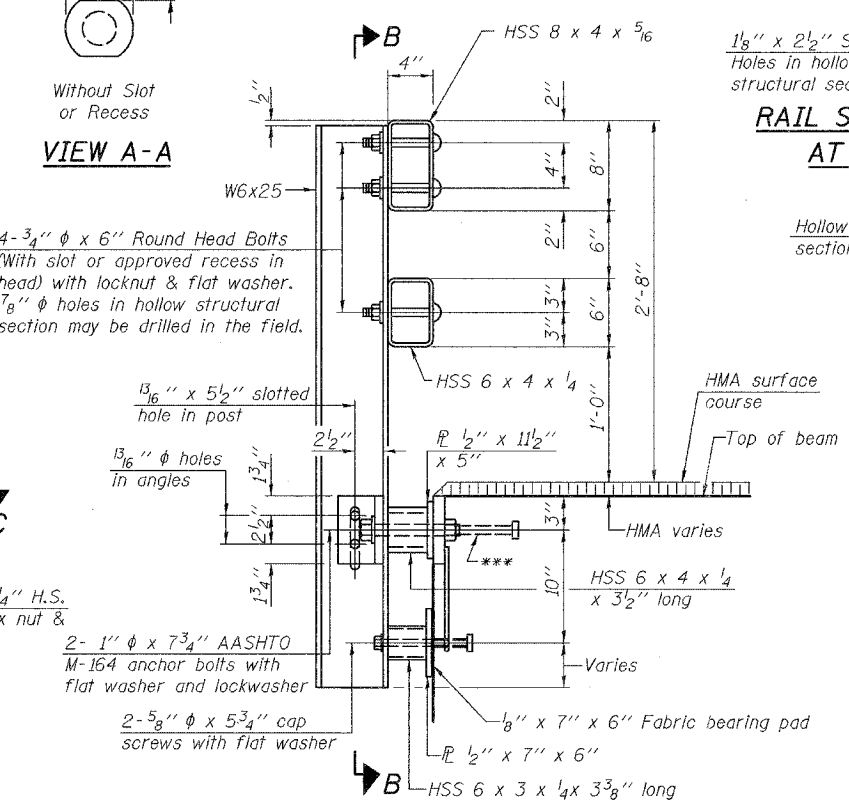
VIEW A-A



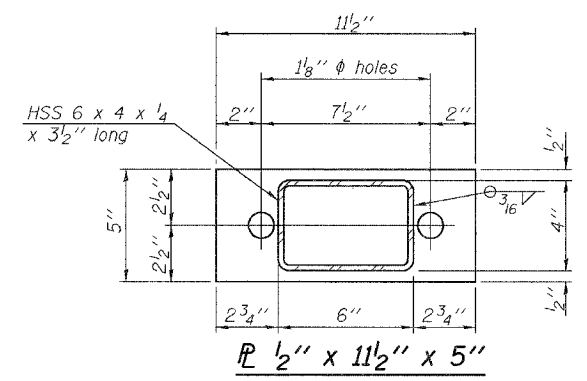
SECTION B-B



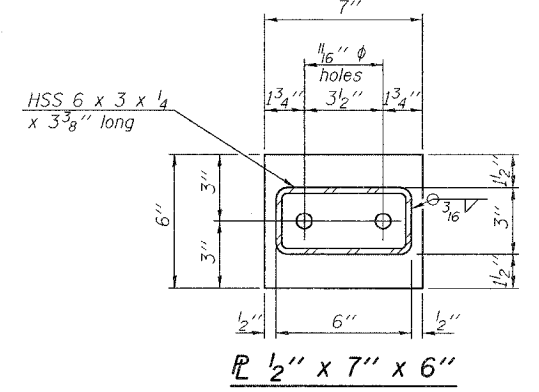
SECTION C-C



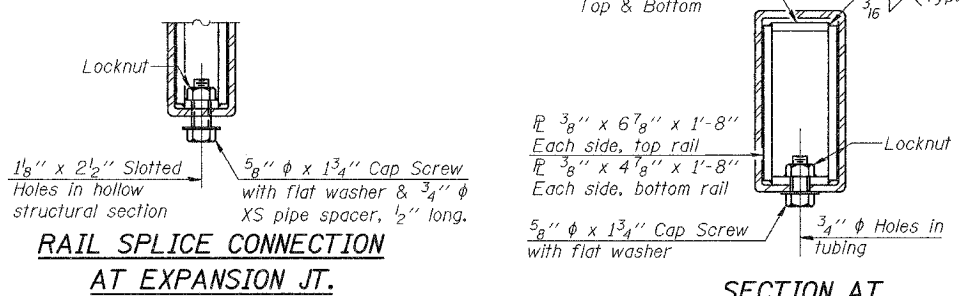
SECTION AT RAIL POST



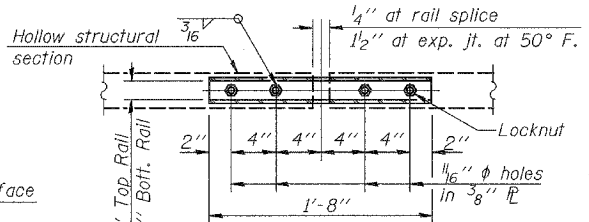
PLAN-BOTT. SPLICE P TYPICAL



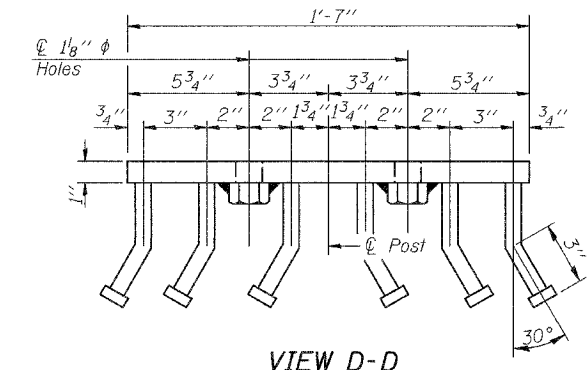
ANCHOR DEVICE



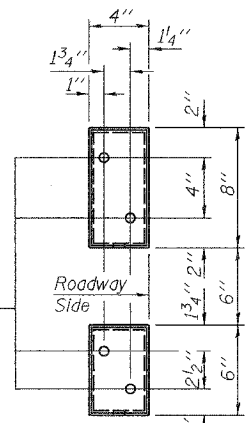
RAIL SPLICE CONNECTION AT EXPANSION JT.



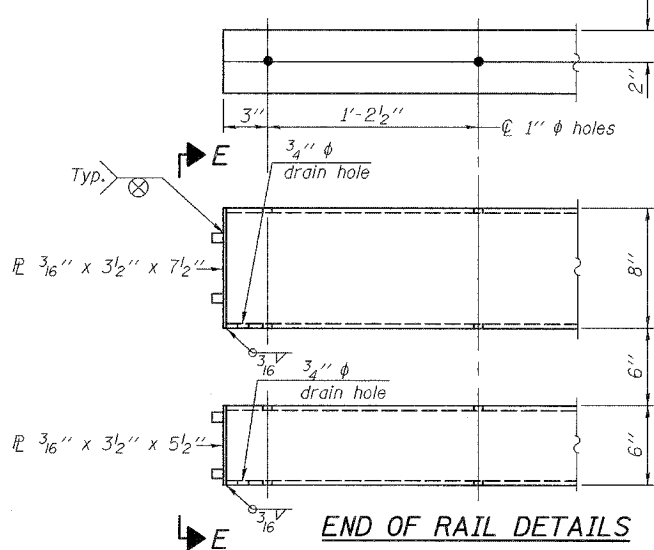
SECTION AT RAIL SPLICE



VIEW D-D



VIEW E-E



END OF RAIL DETAILS

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
***The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.
See Sheet 13 of 16 for rail post locations.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	264

STEEL RAILING, TYPE SM
ILL. ROUTE 145 OVER MASSAC CREEK
F.A.P. ROUTE 132 - SECTION 102BR-1
MASSAC COUNTY
STATION 533+27.15
STRUCTURE NO. 064-0008



DESIGNED	RLM
CHECKED	YSS
DRAWN	PRC
CHECKED	RLM

R-34HMAWS

9-3-07 (6'-3" Maximum Post Spacing) (1/4" minimum to 3/8" maximum HMA thickness)

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

**Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".